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REMARKS/DISCUSSION OF ISSUES

Priority Claim. The Applicant thanks Examiner Zheng for acknowledging the claim for priority and receipt of certified copies of all the priority documents.

Specification. In the Non-Final Office Action, Examiner Zheng objected to the specification on various grounds. The Applicant has amended the specification herein to obviate the objections and to correct typographical errors in the specification. No new matter was introduced by the amendment of the specification herein.

Drawings. In the Non-Final Office Action, Examiner Zheng objected to the drawings under 37 C.F.R. §§ 1.83(a) and 1.84(p)(5). The attached replacement informal drawing sheet 1/6 includes proposed changes to FIG. 1 to obviate Examiner Zheng's § 1.83(a) objection to the drawings. No new matter was introduced into the drawing amendments of FIG. 1 herein.

As to the § 1.84(p)(5) objection, the Applicant respectfully asserts that the specification as filed referenced modulator 16 and amplifier 18 in the paragraph beginning on page 4, line 25. Examiner Zheng is therefore respectfully requested to withdraw the objections to the drawings and approve the proposed replacement informal drawing sheet 1/6.

Claims. In the Non-Final Office Action, Examiner Zheng objected to and rejected pending claims 1-10 on various grounds. The Applicant responds to each objection and rejection as subsequently recited herein, and respectfully requests reconsideration and further examination of the present application under 37 CFR § 1.112:

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A. Examiner Zheng objected to claims 3-6, 9 and 10

The Applicant has cancelled claims 3-6, 9 and 10. Withdrawal of the objection of claims 3-6, 9 and 10 is therefore respectfully requested.

B. Examiner Zheng rejected claims 4 and 5 under 35 U.S.C. §112, ¶2 as being indefinite

The Applicant has cancelled claims 4 and 5 herein. Withdrawal of the rejection of claims 4 and 5 under 35 U.S.C. §112, ¶2 as being indefinite is therefore respectfully requested.

C. Examiner Zheng rejected claims 1, 2, 7 and 8 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,519,292 to *Sakoda* et al.

The Applicant has thoroughly considered Examiner Zheng's remarks concerning the patentability of independent claims 1, 2, 7 and 8 over *Sakoda*. The Applicant has also thoroughly read *Sakoda*. To warrant this anticipation rejection of independent claims 1, 2, 7 and 8, *Sakoda* must show each and every limitation of independent claims 1, 2, 7 and 8 in as complete detail as is contained in independent claims 1, 2, 7 and 8. See MPEP §2131. The Applicant respectfully traverses this anticipation rejection of independent claims 1, 2, 7 and 8, because *Sakoda* fails to disclose and teaches away from the following limitations of independent claims 1, 2, 7 and 8:

1. "which a product of a lower bit rate signal and a second PN-code equals the bit rate of a higher bit rate signal", and "in which a first PN-code sequence is used to spread said product or a higher bit rate signal to a predetermined output chip rate" as recited in independent claim 1;

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2. "determining if a higher bit rate signal is present by checking for the presence of a strong correlation peak in the output of the first operation and no correlation peak in the output of the second operation and if a lower bit rate signal is present by checking for the presence of at least a weak correlation peak in the output of the first operation and for the presence of a strong correlation peak in the output of the second operation" as recited in independent claim 2;

3. "means for multiplying the lower bit rate signal by a second PN-code sequence to give a product having a chip rate substantially equal to the bit rate of the higher bit rate signal, a source of the higher bit rate signal", "means for multiplying the higher bit rate signal, if present, or said product, if present, by a first PN-code sequence to give a spread spectrum signal having a predetermined output chip rate signal", "means for determining the presence of a higher bit rate signal by checking for a strong correlation peak in the output of said first means and no correlation peak in the output of said second means and for determining the presence of a lower bit rate signal by checking for at least a weak correlation peak in the output of said first means and a strong correlation peak in the output of said second means" as recited in independent claim 7; and

4. "means for determining the presence of a higher bit rate signal by checking for a strong correlation peak in the output of said first means and no correlation peak in the output of said second means and for determining the presence of a lower bit rate signal by checking for at least a weak correlation peak in the output of said first means and a strong correlation peak in the output of said second means" as recited in independent claim 8.

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Specifically, as illustrated in FIGS. 6-8, *Sakoda* teaches a predetermined output chip rate of 2048 Kcps for a signal S44 in a transmitter 40 that is obtained by a spreading of a signal S42 by a spread code C11 to yield a signal S43 at 2048 Kcps, which is scrambled by a scrambling code C12 to yield signal S44 at 2048 Kcps. To this end, *Sakoda* teaches a control section 42 for changing a coded bit rate of S42 and a spreading ratio of spread code C11 as a function of time. Specifically, the coded bit rate of S42 is 64 Kcps and the spreading ratio of C11 is 32 for a first time period. The coded bit rate of S42 is 128 Kcps and the spreading ratio of C11 is 16 for a second time period. The coded bit rate of S42 is 204.8 Kcps and the spreading ratio of C11 is 10 for a third time period. And, the coded bit rate of S42 is 256 Kcps and the spreading ratio of C11 is 8 for a final time period. A receiver 60 operates in a reverse order of transmitter 40. See, *Sakoda* at column 9, line 6 to column 13, line 52.

Clearly, *Sakoda* teaches spread code C11 as the first PN-code sequence recited in independent claims 1, 2, 7 and 8, and fails to teach the second PN-code sequence as recited in independent claims 1, 2, 7 and 8 in view of the fact that scrambling code C12 is not a spread code. Furthermore, *Sakoda* teaches a different spreading ratio for spread code C11 as multiplied to different coded bit rates of signal S42 whereby *Sakoda* essentially teaches four different spread codes C11, and fails to teach a single spread code of a particular spreading ratio as being multiplied to two different signals having the same bit rate as required by independent claims 1, 2, 7 and 8. Additionally, *Sakoda* teaches a time based system for knowing the current coded bit rate of signal S42 and its counterpart signal S65, and therefore teaches away from any type of checking of correlation peaks as required by independent claims 2, 7 and 8. This is further evidenced by the failure of *Sakoda* to teach any type of input in to control sections 42 and 70 for the purposes of monitoring signals S42 and S65.

While the Applicant respectfully traverses this anticipation rejection of claims 1, 2, 7 and 8 as shown above, the Applicant has cancelled claims 1-10 herein, and added new claims 11-22 as rewrites of cancelled claims 1-10. The Applicant has further added a new claim 23. The Applicant respectfully asserts that *Sakoda* and the

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remaining art of record, alone or in combination, fails to disclose, teach or suggest the following limitation combinations of new independent claims 11, 12, 17, 20 and 23:

1. “multiplying a lower bit rate signal and a second PN-code sequence to yield the lower bit rate product, wherein the lower bit rate product has a chip rate equal to a bit rate of the higher bit rate signal” as recited in independent claims 11, 17 and 23;
2. “determining if the higher bit rate signal is present in the spread spectrum signal by checking a presence of a first strong correlation peak in an output of the first operation and an absence of a correlation peak in an output of the second operation” and “determining if the lower bit rate signal is present in the spread spectrum signal by checking a presence of at least a weak correlation peak in the output of the first operation and a presence of a second strong correlation peak in the output of the second operation” as recited in independent claim 12; and
3. “means for determining a presence of the higher bit rate signal in the spread spectrum signal by checking for a first strong correlation peak in the output of said first correlation means and an absence of a correlation peak in an output of the second correlation means”, and “means for determining the presence of the lower bit rate signal in the spread spectrum signal by checking for at least a weak correlation peak in the output of the first correlation means and a second strong correlation peak in the output of the second correlation means” as recited in independent claims 17 and 20.

Withdrawal of the rejection of claims 1, 2, 7 and 8 under §102(e) as being anticipated by *Sakoda* and an allowance of new claims 11-23 are therefore respectfully requested.

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SUMMARY

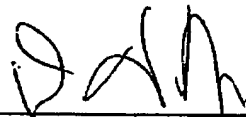
Examiner Zheng's objection and rejections of claims 1-10 have been obviated by the cancellation of claims 1-10 herein. The Applicant has supported an allowance of new claims 11-23 over the art of record, particularly *Sakoda*. The Applicant respectfully submits that claims 11-23 as listed herein fully satisfy the requirements of 35 U.S.C. §§ 102, 103 and 112. In view of the foregoing, favorable consideration and early passage to issue of the present application is respectfully requested. If any points remain in issue that may best be resolved through a personal or telephonic interview, Examiner Zheng is respectfully requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,
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